

Randomized Controlled Trial of Telehealth-Enabled Versus In-Person Parent-Mediated Behavioral Treatment for Challenging Behaviors in Autism Spectrum Disorder

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Rationale and Objectives: Children diagnosed with autism spectrum disorder (ASD) often display challenging behaviors, such as aggression or self-injury, that can cause significant distress for parents, caregivers, teachers, and others involved in the child's care. Behavioral treatments based on the principles of applied behavior analysis are highly effective for reducing or eliminating challenging behaviors commonly exhibited by children diagnosed with ASD. An important component of successful behavioral treatments for challenging behavior in ASD is the involvement of parents or primary caregivers in the child's behavioral care, because parental involvement readily promotes generalization and maintenance of behavioral skills. Unfortunately, due to limited availability of qualified providers and the high costs associated with delivering traditional in-person behavioral care for ASD, particularly in rural areas, many parents or primary caregivers are unable to learn how to manage their child's challenging behavior. This lack of exposure to effective care can vastly lower quality of life for both the child and their family.

Telehealth may be an effective solution to help families access parent-mediated behavioral therapy in their home communities without the need to travel to a clinic or have a provider come to their home. However, with the exception of one recently published small-scale study, remote delivery of parental-mediated behavioral therapy for children with ASD has not been directly compared to traditional in-person behavioral therapy in a randomized controlled trial. Furthermore, while benefits coverage for affected families has improved, not all insurance providers will cover parent-mediated behavioral therapy delivered via telehealth, further limiting access to care for families in rural or underserved areas. Our proposed study will address this gap in the scientific literature and significantly inform clinical decision-making by establishing whether parent-mediated behavioral therapy delivered via telehealth is equivalent or better than traditional in-person delivery.

Type of Patient Helped and How: This study aims to answer the critical question of whether families of children with ASD can access parent-mediated behavioral therapy for their child's challenging behavior via telehealth that is more effective and satisfactory than what they would receive with traditional in-person behavioral therapy for children diagnosed with ASD. The study results will be extremely important for determining whether telehealth offers advantages to families above and beyond traditional in-person behavioral therapy for challenging behavior in ASD. Specialty providers will be able to utilize the results of this study to decide which treatment options are best to offer a particular family, and families will be able to use the study results as they are considering which method of care will best meet their individual family and child's needs. The study holds great promise for advancing crucial knowledge about the care of children diagnosed with ASD who exhibit challenging behavior that can be highly stressful for the patient's family, teachers, and other stakeholders in the child's life.

Clinical Applications, Benefits, and Risks: Through engagement with stakeholders (Phase 1 of the project), we anticipate that parents will be receptive to telehealth-enabled behavioral interventions, that stakeholders will describe more benefits than barriers to treatment with telehealth, and that opportunities to enhance parent-mediated behavioral therapies using different telehealth modalities (e.g., synchronous videoconference, telephonic care, text messages) will be identified. Subsequently, in our randomized study (Phase 2 of the project), we expect to find that families receiving parent-mediated behavioral therapy via telehealth will report significantly less parental stress associated with their child's challenging behavior and higher quality of life compared to those who receive traditional in-person parent-mediated behavioral therapy.

Impact: Our project will directly address whether ABA-based parent-mediated behavioral therapy delivered via telehealth is more efficient and results in less stress on the family compared to traditional in-person ABA-based behavioral therapy for the treatment of challenging behavior in children diagnosed with ASD. Families who have approval for telehealth services are currently faced with the dilemma of whether to wait for an ABA provider to become available in their area who has the capacity to deliver traditional in-person parent-mediated behavioral therapy, or whether to receive parent-mediated behavioral therapy more immediately via telehealth. Our proposed study will address this critical and time-sensitive gap in the scientific literature, and the results will have a significant and immediate effect on practice delivery, as well as patient and family outcomes, by informing clinical decision-making and funder policy. The study also holds particular relevance for military personnel given the implications of stress management for military performance and readiness.